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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,751	10/29/2003	John Frederick Porter	11277-0039	7560

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John F. Letchford
Klehr, Harrison, Harvey, Branzburg & Ellers LLP
260 South Broad Street
Philadelphia, PA 19102

EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/696,751	PORTER, JOHN FREDERICK	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *102903*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1) The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

> The oath or declaration is defective because:
> The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 601.01(a).

The declaration identifies the specification as being application 10/155,650 (the parent application) filed 5-23-02 instead of application 10/696751 (this application) filed 10-29-03; it being noted that application 10/155650 contains twenty six original claims whereas this application 10/696751 contains eight original claims.

2) Applicant is advised that should claim 7 be found allowable, claim 8 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claims 7 and 8 have the same wording except that claim 7 describes the treating step before the uniting step whereas claim 8 describes the uniting step before the treating step. Since claims 7 and 8 fail to require the treating and uniting steps to be performed in the listed order, claims 7 and 8 have the same scope.

3) The disclosure is objected to because of the following informalities: The continuing data on page 1 of the specification incorrectly describes this application as being a divisional of application 10/155,650. This application is a continuation of

application 10/155650 since both claims 1-8 of this application and pending claims 11-26 of 10/155650 are directed to a "method of making" (characterized as Group III in the restriction requirement dated 11-28-01 in grandparent application 09/478,129). On page 1 of the specification, it is suggested to change "This application is a divisional of pending United States Patent Application Serial No. 10/155,650" to --This application is a continuation of pending United States Patent Application Serial No. 10/155,650--

Appropriate correction is required.

4) A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5) Claims 1-6 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 20-25 of copending Application No. 10/155,650. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claims 1-6 of this application have the same wording as claims 20-25 of application 10/155,650 respectively.

6) The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 7 and 8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11-26 of copending Application No. 10/155,650 in view of Newman et al (US 6054205), Great Britain '687 (GB 2023687) or Schupack (US 4617219).

Claim 11 of copending 10/155650 recites all of the claimed steps of this application except the embedding step. However, it would have been obvious to one of ordinary skill in the art to embed the reinforcement made by the process of claim 11 of copending in hydraulic cement as claimed since (1) claim 11 of copending describes the reinforcement as being "for embedment within hydraulic cement" and (2) Newman et al, Great Britain '687 or Schupack suggest embedding reinforcement comprising a nonwoven and a mesh in cementitious material. Claims 7 and 8 do not require the treating and uniting steps to be performed in the listed order. In any event: dependent claims 16 and 17 of copending 10/155650 describe "treating before uniting" and "uniting before treating" respectively.

Claim 20 of copending 10/155650 recites the claimed treating and embedding steps of this application but does not recite the uniting step. However, it would have

been obvious to one of ordinary skill in the art to unite the open mesh first component and nonwoven second component of claim 20 of copending 10/155650 since (1) copending 10/155650 recites including the open mesh first component and nonwoven web second component in a composite fabric reinforcement and (2) Newman et al, Great Britain or Schupack suggest uniting a nonwoven and mesh to form a reinforcement for embedment in cementitious material.

This is a provisional obviousness-type double patenting rejection.

7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8) **Claims 1-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman et al (US 6054205) in view of Great Britain '687 (GB 2023687) and optionally Schupack (US 4617219).**

Newman et al discloses a method of making a glass fiber facing sheet for making a cement board comprising (1) providing an open mesh glass fiber scrim wherein the scrim comprises longitudinal and transverse glass fiber yarns; (2) passing the open mesh glass fiber scrim through a resinous bath so as to form a polymer coating on the yarns wherein the polymer coating is alkali and moisture resistant (col. 4 line 47 to col. 5 line 67 and col. 7 line 57 to col. 8 line 12; especially col. 5 lines 46-61, col. 8 lines 6-11); and (3) joining a nonwoven web to the scrim by forming a melt blown nonwoven

thermoplastic fiber web on the coated open mesh glass fiber scrim such that the thermoplastic fibers adhere to the coated open mesh glass fiber scrim (col. 6 lines 1-63, and col. 8 lines 13-24).

Newman et al also teaches using the facing sheet to prepare cementitious boards of various types using cement board manufacturing apparatus and manufacturing layouts. See col. 3 lines 38-43. In particular, Newman et al teaches depositing a cementitious slurry on a first facing sheet and applying a second facing sheet on the cementitious slurry and pressing using rolls 80 such that the cementitious slurry is forced up through the mesh openings of the glass fiber facing sheet to mechanically integrate (i.e. embed) the exposed three dimensional grid profile structure of the facing sheet into the cementitious core. See figure 6 and description relating thereto. As cementitious material, Newman et al teaches using gypsum cement, Portland cement, etc. See col. 9 lines 15-20. The cement board has a smooth exterior surface. See for example col. 2 lines 61-63.

Newman et al does not specifically recite treating at least one of the nonwoven and scrim of the fiber sheet to "enhance at least one of wetting and adhesion characteristics thereof with respect to hydraulic cement when ... embedded therein".

As to claims 1-5 and 7-8, it would have been obvious to one of ordinary skill in the art to treat at least one of the nonwoven and scrim of Newman et al's fiber sheet to "enhance at least one of wetting and adhesion characteristics thereof with respect to hydraulic cement when ... embedded therein" for the advantage of improving / expediting the mechanical integration desired by Newman et al since Great Britain '687,

also directed to a cementitious board having a fiber sheet embedded therein, suggests surface treating at least one of fibers of the nonwoven and the scrim with a wetting agent to achieve a more rapid and intimate wetting of the fibers by the cementitious material (i.e. gypsum). See page 2 lines 41-47, 52-59, page 3 lines 6-22, 64-71) of Great Britain '687.

Claims 7 and 8 read on simultaneously providing and uniting. In any event: As to claims 7 and 8, it would have been an obvious alternative to form the nonwoven web and scrim and *then* unite since Schupack, also directed to a cementitious board having a fiber sheet embedded therein, suggests providing a nonwoven and a scrim and then bonding the nonwoven to the scrim by any appropriate means such as melt bonding and the like in order form a fiber sheet for embedment in cementitious material. See for example col. 4 lines 14-45, example 1.

Claims 7 and 8 do not require the treating and uniting steps to be performed in the listed order. In any event: As to claims 7 and 8, it would have been obvious to treat the scrim before or after uniting the scrim to the melt blown web in view of Great Britain '687's suggestion to treat fibers of a nonwoven or scrim of a fiber sheet and then embed the fiber sheet in cementitious material; it being noted that Newman et al discloses treating the scrim of the fiber sheet *prior* to uniting (col. 8 lines 5-15) or *after* uniting (see application of slurry 91 in figure 6).

As to the dependent claims: As to claim 2, Newman et al teaches coating the glass fiber yarns with polymeric material (e.g. a thermoplastic polymer material). As to claims 3 and 4, Newman et al teaches using thermoplastic fibers for the nonwoven web

(the melt blown web). As to claim 5 (2-15 strands per inch), Newman et al teaches using less 10 strands per inch (col. 2 lines 28-30).

9) **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newman et al (US 6054205) in view of Great Britain '687 (GB 2023687) and optionally Schupack (US 4617219) as applied above and further in view of Porter et al (US 5763043).**

As to claim 6, it would have been obvious to use bundled glass fibers having a linear density of about 33 to about 300 tex as the glass fiber yarns for Newman et al's scrim since Porter et al teaches that rovings (e.g. fiberglass rovings) having a linear density between 33 and 2200 grams per thousand meters are suitable for making a scrim for embedment in cementitious material. See for example col. 3 lines 30-36 and col. 7 lines 25-27.

Remarks

10) Piazza (US 4229497) is of interest for disclosing assisting wetting at col. 5 lines 12-13. Kennedy et al (US 5308692) is of interest for disclosing assisting wetting at col. 9 lines 56-61.

11) No claim is allowed.

12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
May 12, 2004

Steven D. Maki 5-12-04
STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733